

SERVICE MANUAL

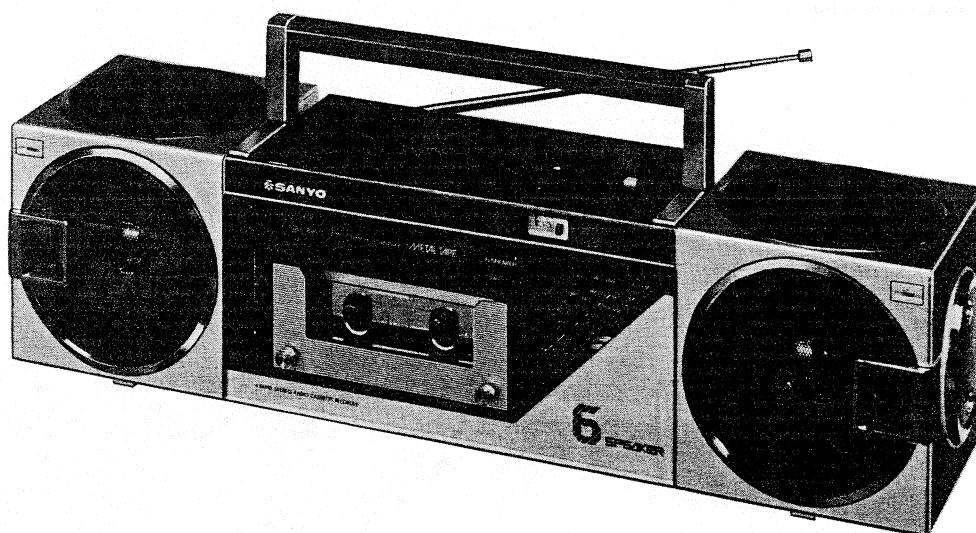
CASSETTE RECORDER



SANYO

M 7740L

(EUROPE)



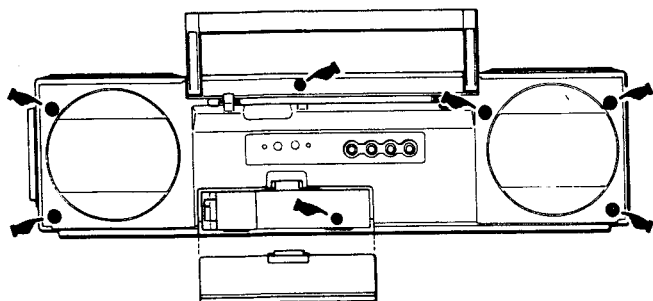
SPECIFICATIONS

Recording system	AC bias, 4-track stereo	Frequency response	63 – 14,000 Hz (NORMAL)
Erasing system	AC erase, 2-track		63 – 14,000 Hz (CrO ₂)
Tape speed	4.75 cm/sec (1-7/8 i.p.s.)		63 – 14,000 Hz (METAL)
Fast forward and Rewind time	2 min. (C-60)	Output power	8 W maximum
Frequency range	LW: 150 – 285 kHz	Power source	DC: 9 V, "R14" (SUM-2) x 6
	MW: 525 – 1,605 kHz		AC adaptor (included)
	SW: 5.95 – 18 MHz		DC: 9 V – AC: 220 V, 50 Hz
	FM: 87.5 – 108 MHz		Car battery adaptor (CA97S, optional)
	MIC: 5k ohms		DC: 9 V – 12 V car battery
Terminal impedance	LINE IN: 100k ohms	Dimensions	449 (W) x 124 (H) x 128 (D) mm
	LINE OUT: 1k ohms		(17-11/16" x 4-15/16" x 5-1/16")
	EXT SP: 2 ~ 8 ohms	Weight	Approx. 2.9 kg (6 lbs. 6 ozs.)
	PHONES: 32 ohms		including batteries.

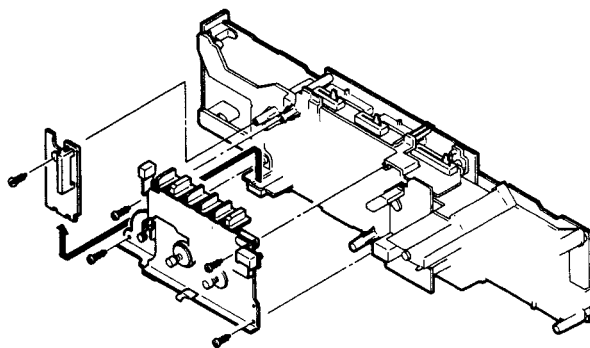
* Specifications subject to change without notice.

WM-10771

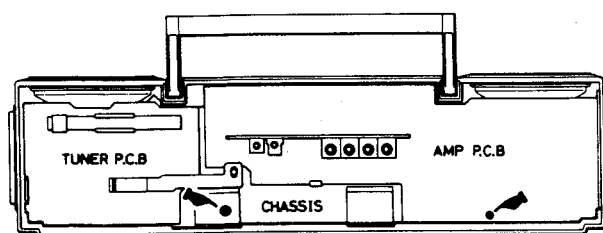
REMOVAL OF BACK LID



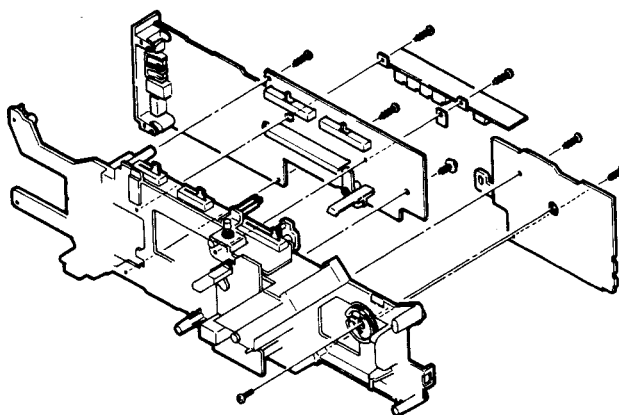
REMOVAL OF MECHANISM



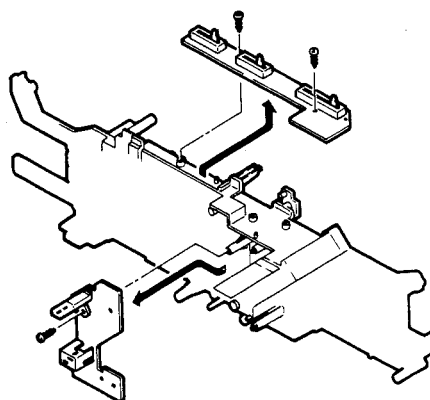
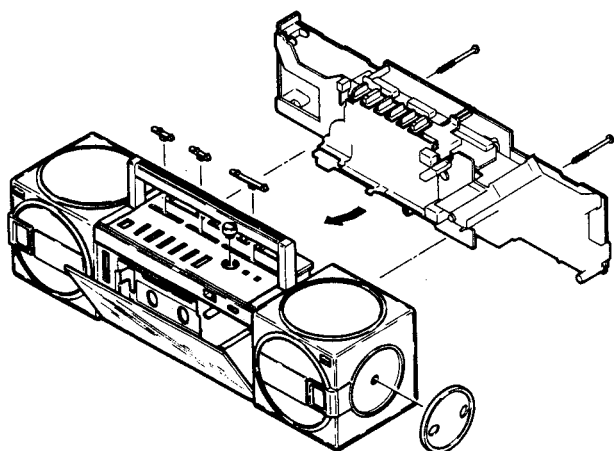
REMOVAL OF CHASSIS



REMOVAL OF P.C.B s

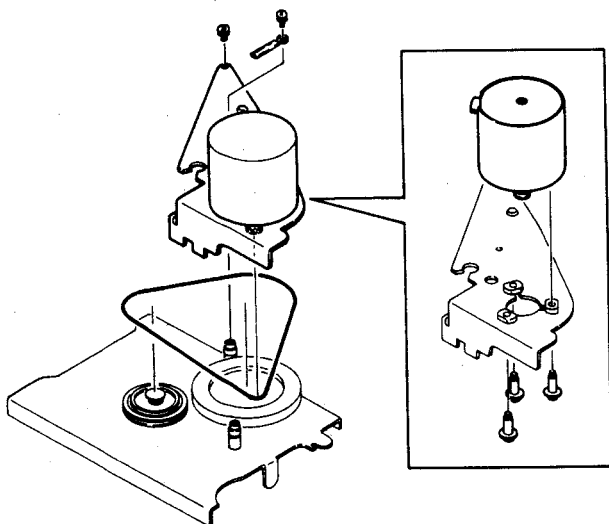


REMOVAL OF CABINET



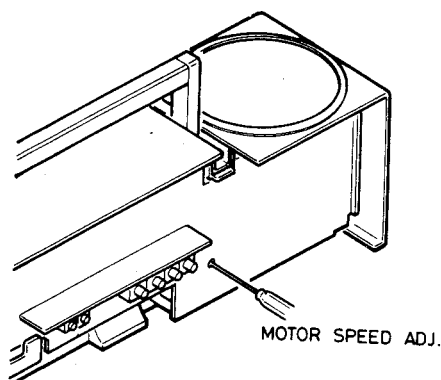
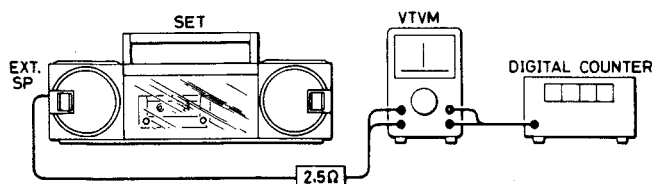
HOW TO REPLACE THE MOTOR AND BELT

• Replacing the motor and belt



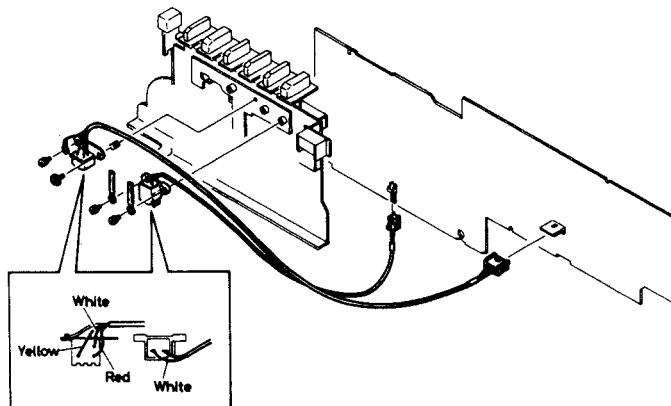
• Adjusting the motor speed

1. Load with test tape (MTT-111, etc, 3,000 Hz).
2. Press play button.
3. Turn SVR provided in the back side of the motor until the frequency counter reads 3,000 Hz.



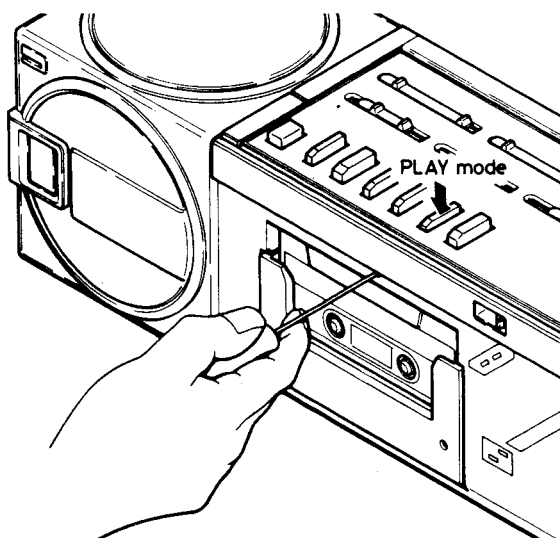
HOW TO REPLACE THE HEAD, ADJUST THE AZIMUTH

• Replacing the head



• Adjusting the head azimuth

- * When the head is replaced, demagnetize it with head eraser.
- * Clean the head before adjusting.
- * Remove the cassette lid.



1. Load with azimuth adjusting tape (VTT-658 etc.; 10 kHz).
2. Press play button.
3. Turn the azimuth adjusting screw with a Phillips screwdriver so that the right and left channel outputs attain the maximum during playback.

ADJUSTMENT OF MECHANISM

- * Clean the head, capstan and pinch roller before measuring.
- * Check the torque and tension.

Measuring item	Take-up torque	Back tension	Tape tension
Cassette for measurement	PLAY: TW-2111 F.FWD/REW: TW-2231	PLAY/F.FWD: TW-2111 REW: torque gauge	Drive power cassette TW-2412
PLAY	35 ~ 60 gr·cm	3 ~ 5 gr·cm	90 gr or more
F.FWD	80 ~ 110 gr·cm	3 ~ 5 gr·cm	---
REW	80 ~ 110 gr·cm	4 ~ 8 gr·cm	---

ADJUSTMENT OF TUNER

MW

BAND SELECT SW : MW

Step	Adjusting Circuit	Connections		SG Frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to Test Loop	Connect sweep generator to IC301(9), GND	460kHz	Low	T302, 304	MAX.
2	Tuning Coverage	Connect AM SG to Test Loop	Connect VTVM to speaker terminals	505kHz	Low End	L110	MAX.
3				1650kHz	High End	VCT-4	
4	Tracking	Connect AM SG to Test Loop	Connect VTVM to speaker terminals	600kHz	600kHz	L106	MAX.
5				1400kHz	1400kHz	VCT-3	
6	Repeat adjustments						

LW

BAND SELECT SW : LW

Step	Adjusting Circuit	Connections		SG Frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	Tuning Coverage	Connect AM SG to Test Loop	Connect VTVM to speaker terminals	145KHz	Low End	L111	MAX.
2				295KHz	High End	CT-3	
3	Tracking	Connect AM SG to Test Loop	Connect VTVM to speaker terminals	160KHz	160KHz	L107	MAX.
4				280KHz	280KHz	CT-1	
5	Repeat adjustments						

SW

BAND SELECT SW : SW

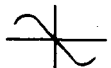
DUMMY ANTENNA PAD (50Ω, 10pF)

Step	Adjusting Circuit	Connections		SG Frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	Tuning Coverage	Connect AM SG to ANT terminal through dummy	Connect VTVM to speaker terminals	5.8MHz	Low End	L109	MAX.
2				19.0MHz	High End	CT-2	
3	Tracking	Connect AM SG to ANT terminal through dummy	Connect VTVM to speaker terminals	7.0MHz	7.0MHz	L105	MAX.
4				18.0MHz	18.0MHz	CT-4	
5	Repeat adjustments						

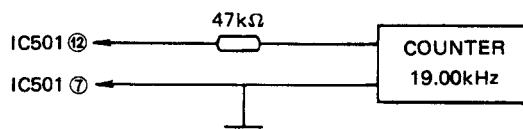
FM

BAND SELECT SW : FM

FM DUMMY ANTENNA: 75Ω unbalance

Step	Adjusting Circuit	Connections		SG Frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to TP-1 & TP-2	Connect sweep generator to IC301(9), GND	10.7MHz	Low	T301	
2	Detector		Connect sweep generator to IC301(9), GND			T303	
3	Tuning Coverage	Connect FM SG to TP-1(H) & TP-2(E)	Connect VTVM to speaker terminals	87.35MHz	Low End	L102	MAX.
4				108.3MHz	High End	VCT-2	
5	Tracking	Connect FM SG to TP-1(H) & TP-2(E)	Connect VTVM to speaker terminals	90.0MHz	90.0MHz	L101	MAX.
6				106.0MHz	106.0MHz	VCT-1	
7	Repeat adjustments						

(3) Adjustment of FM VCO
Radio band selector: FM STEREO

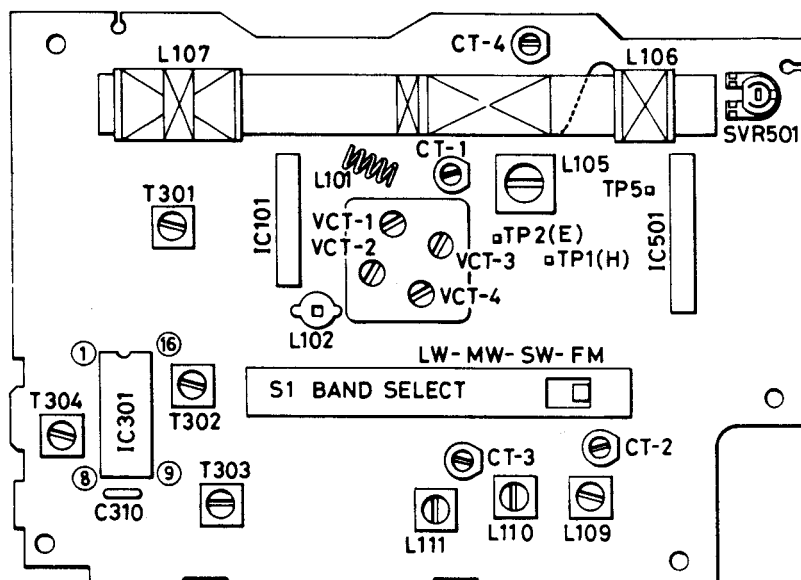


Turn SVR501 until the frequency counter reads 19.00 kHz ± 100 Hz.

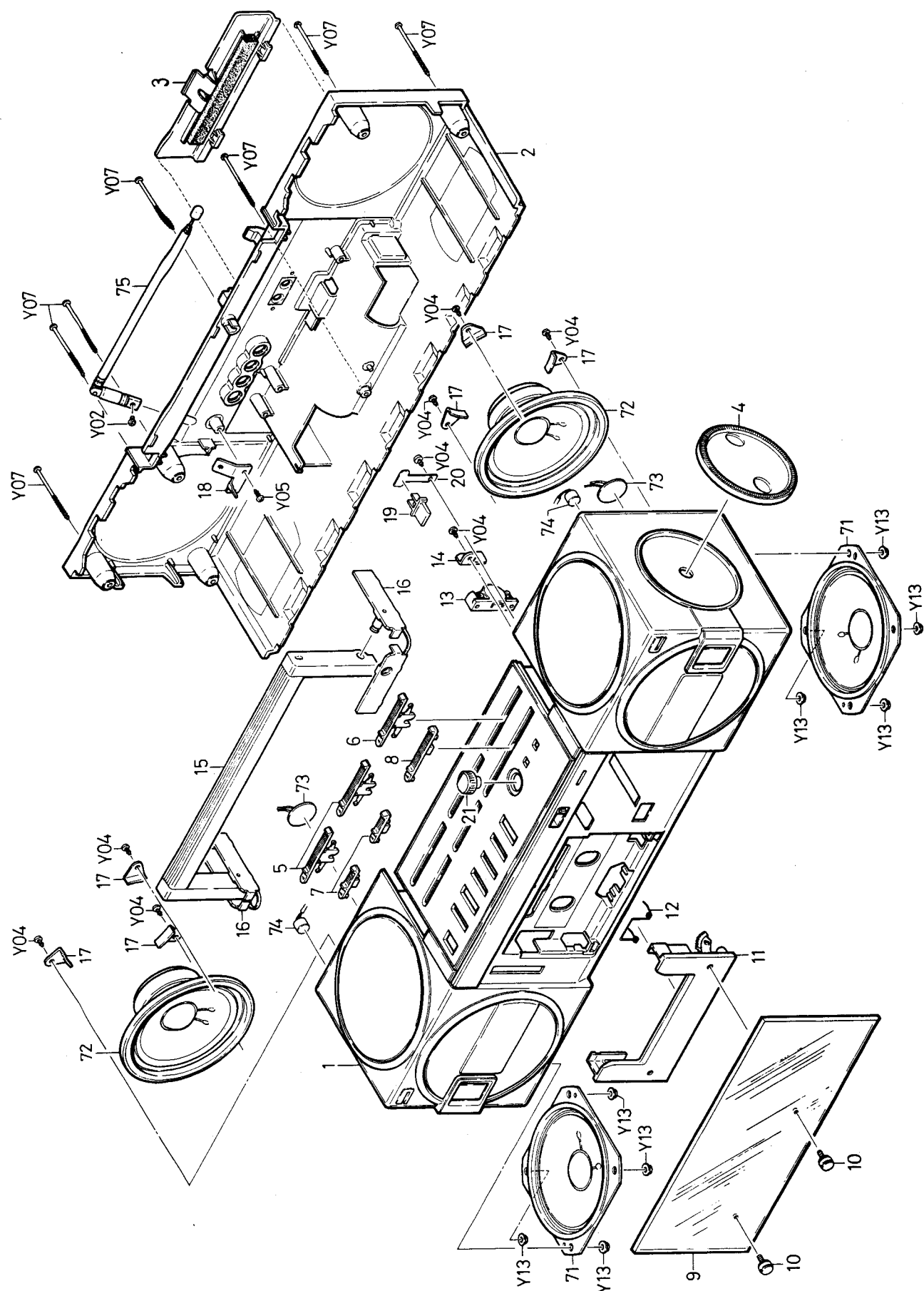
ADJUSTMENT OF TUNER

* Adjust the intermediate frequency of AM(MW/SW1/SW2)
frequency of ceramic filter.

DC 9.0V
2.5Ω
50mW (0.354V)
RADIO



CABINET EXPLODED VIEW





PARTS LIST

*(S): Silver (R): Dynamic Red (K): Dynamic Black (B): Pearl Blue

Key No.	Parts No.	Description	Q'ty	Key No.	Parts No.	Description	Q'ty
PACKING				CABINET & CHASSIS			
	141-6-133T-45302	Individual Carton, Silver, (S)	1	39	141-2-345T-00100	Steel Ball, 1/8 inch	1
	141-6-133T-45310	Individual Carton, Red, (R)	1	40	141-2-856T-28300	Spring Coil, Band Select Lever	1
	141-6-133T-45321	Individual Carton, Black, (K)	1	41	141-2-742T-99800	Lever, RECORD/PLAY Change	1
	141-6-133T-45311	Individual Carton, Blue, (B)	1	42	123-2-566R-12000	Tuning Shaft, RECORD/PLAY	1
	141-6-144T-88500	Pad, Left	1	43	141-2-853T-83200	Spring Plate, RECORD/PLAY	1
	141-6-144T-88400	Pad, Right	1	44	141-2-732T-14300	Slide, Band Select	1
	141-6-410T-90104	Instruction Manual	1	45	141-2-462T-76900	Boss	1
	141-6-478T-20800	Sticker, 4-Woofer 6-Speaker System	1	46	141-2-732T-14400	Slide, Band Select	1
	141-6-231T-60405	Polyethylene Bag, Set	1	47	141-2-310T-85800	Bracket, LINE IN/LINE OUT/ MIC P.C.B. mtg.	2
	△ 4-191T-05100	AC Adaptor, 9V	1	48	141-2-247T-15500	Sheet, Bracket mtg.	1
CABINET & CHASSIS				49	141-2-367T-37001	Bracket Socket, Jack Base, Silver, (S)	1
					141-2-367T-37031	Bracket Socket, Jack Base, Black, (R)(K)	1
					141-2-367T-37041	Bracket Socket, Jack Base, White, (B)	1
1	141-0-111T-56808	Cabinet Assembly, Silver, (S)	1	50	141-2-160T-26530	Push Button, 6 SPEAKER, Green	1
	141-0-111T-56813	Cabinet Assembly, Red, (R)	1			Not use	1
	141-0-111T-56814	Cabinet Assembly, Black, (K)	1	51		Veil, Volume	1
	141-0-111T-56815	Cabinet Assembly, Blue, (B)	1	52	141-2-241T-26200	Bracket, LED, TUNING/FM STEREO	1
2	141-0-126T-43308	Back Lid Assembly, Silver, (S)	1	53	141-2-210T-46301	Bracket, LED, TUNING/FM STEREO	1
	141-0-126T-43317	Back Lid Assembly, Red, (R)	1			Bracket, LED, 4WD SOUND/ POWER BATTERY	1
	141-0-126T-43328	Back Lid Assembly, Black, (K)	1	54	141-2-210T-46401	Bracket, LED, VU LEVEL METER	1
	141-0-126T-43318	Back Lid Assembly, Blue, (B)	1	55	141-2-210T-46200	Push Button, FM MODE, Black, (S)(R)(K)	1
3	141-0-128T-20504	Battery Lid Assembly, Silver, (S)	1		141-2-160T-26550	Push Button, FM MODE, White, (B)	1
	141-0-128T-20500	Battery Lid Assembly, Red, (R)	1	61	141-2-453T-01200	Washer, Fiber, 3x8x1mm	1
	141-0-128T-20501	Battery Lid Assembly, Black, (K)	1	62	141-2-457T-23000	Special Washer, "E" Ring, 2mm	1
	141-0-128T-20503	Battery Lid Assembly, Blue, (B)	1	63	141-2-472T-01001	Lug, MIC Lead mtg.	1
4	141-2-163T-94801	Rotary Knob, TUNING	1	HARDWARE			
5	141-2-164T-32700	Slide Knob, FUNCTION/ TAPE, Black, (S)(R)(K)	2	Y01		Pan Hd, Screw, 2.6x4mm	1
	141-2-164T-32730	Slide Knob, FUNCTION/ TAPE, White, (B)	2	Y02		Pan Hd. Screw, 3x6mm	1
6	141-2-164T-32800	Slide Knob, BAND, Black, (S)(R)(K)	1	Y03		Pan Hd. Tapping Screw, 3x4mm	2
	141-2-164T-32830	Slide Knob, BAND, White, (B)	1	Y04		Pan Hd. Tapping Screw, 3x8mm	8
7	141-2-164T-32900	Slide Knob, TONE/BALANCE, Black, (S)(R)(K)	2	Y05		Pan Hd. Tapping Screw, 3x10mm	2
	141-2-164T-32930	Slide Knob, TONE/BALANCE, White, (B)	2	Y06		Pan Hd. Tapping Screw, 3x12mm	11
8	141-2-164T-33000	Slide Knob, VOLUME, Black, (S)(R)(K)	1	Y07		Pan Hd. Tapping Screw, 3x45mm	9
	141-2-164T-33030	Slide Knob, VOLUME, White, (B)	1	Y08		Not used	
9	141-2-131T-41205	Clear Window, Silver (S)	1	Y09		Pan Tapping Washer Hd., 3x12mm	1
	141-2-131T-41235	Clear Window, Red, (R)	1	Y10		Binding Hd. Tapping Screw, 3x8mm	2
	141-2-131T-41245	Clear Window, Black, (K)	1	Y11		Flat Hd. Tapping Screw, 3x12mm	4
	141-2-131T-41255	Clear Window, White, (B)	1	Y12		Hexagon Nut, 3mm	1
10	141-2-421T-44700	Special Screw, Clear Window	2	Y13		Hexagon Nut Washer Hd., 3mm	8
11	141-0-124T-34320	Top Lid Assembly	1	Y14		Washer, 3x10x1mm	1
12	141-2-852T-74900	Spring Wire, Top Lid	1	Y15		Not used	
13	141-0-581T-07100	Gear Assembly	1	Y16		Pan Hd. Screw, 2.6x6mm	1
14	141-2-310T-85600	Bracket, Gear Assembly mtg.	1	Y17		Pan Hd. Tapping Screw, 3x6mm	1
15	141-0-171T-20600	Handle Assembly, Black, (S)(R)(K)	1	Y18		Tooth Lock Washer, 3x6.5x0.45mm	1
	141-0-171T-20604	Handle Assembly, White, (B)	1	ELECTRICAL			
16	141-2-271T-21360	Bracket Handle, Silver, (S)	2	71	4-151T-44400	Speaker, Top Woofer, 12 ohm	2
	141-2-271T-21300	Bracket Handle, Red, (R)	2	72	4-151T-44300	Speaker, Front Woofer, 2.4 ohm	2
	141-2-271T-21330	Bracket Handle, Black (K)	2	73	4-151T-44500	Speaker, Tweeter	2
	141-2-271T-21350	Bracket Handle, Blue, (B)	2	74	4-153T-11871, 4-153T-11872	or Mic. (Left & Right a pair)	2
17	123-2-310R-25700	Bracket, Speaker mtg.	6	75	4-244T-06600	Rod Antenna	1
18	141-2-310T-85700	Bracket, Rod Antenna	1	76	4-222T-99200	Variable Resistor, 10K ohm, FINE TUNE	1
19	141-2-160T-26400	Push Button, REC MUTE	1		4-240T-25300	Socket, Rod Antenna, FINE TUNE	5
20	141-2-853T-83100	Spring Plate, REC MUTE Button	1		4-240T-43100	Socket, 3P, Front Speaker	1
21	141-2-163T-92301	Rotary Knob, FINE TUNE, Black, (S)(R)(K)	1		4-240T-62700	Socket, 4P, B-MIC	1
	141-2-163T-92331	Rotary Knob, FINE TUNE, White, (B)	1		4-240T-62600	Socket, 3P, Top Speaker	1
31	141-0-311T-44700	Chassis Assembly	1				
32	141-0-566T-14300	Tuning Shaft Assembly	1				
33	141-2-538T-14900	Drum, Dial	1				
34	123-2-481R-00600	Spring Coil, Dial Rope	1				
35	141-2-340T-03001	Rope, 0.3φx800mm	1				
36	141-2-511T-26300	Pointer	1				
37	141-2-661T-33200	Pulley, Dial Rope	1				
38	141-2-742T-99700	Lever, Band Select	1				

PARTS LIST

Key No.	Parts No.	Description	Q'ty	Key No.	Parts No.	Description	Q'ty
ELECTRICAL				ELECTRICAL			
81	141-4-250T-94871	P.C.B. Assembly	1	C101		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
IC101		Integrated Circuit, BA4403	1	C102		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
IC301		Integrated Circuit, TA7640AP1	1	C103		Ceramic, 18pF, $\pm$ 5%, 50V	1
IC501		Integrated Circuit, LA3365	1	C104		Ceramic, 5pF, $\pm$ 0.25pF, 50V	1
Q101		Transistor, 2SC930E1	1	C105		Ceramic, 18pF, $\pm$ 5%, 50V	1
Q301		Transistor, 2SA608F	1	C106		Ceramic, 13pF, $\pm$ 5%, 50V	1
D101		Diode, 1S553T	1	C107		Ceramic, 0.047 μ F, $\pm$ 20%, 25V	1
D102		Diode, 1S553A	1	C108		Ceramic, 2pF, $\pm$ 0.25pF, 50V	1
D103		Diode, GMA01	1	C109		Ceramic, 0.047 μ F, $\pm$ 20%, 25V, BC-type	1
D301		Diode, GMA01	1	C110		Ceramic, 0.047 μ F, $\pm$ 20%, 25V, BC-type	1
D501		Diode, GMA01	1	C111		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
L101	4-265T-02700	VHF Coil, FM RF	1	C112		Ceramic, 0.001 μ F, $\pm$ 10%, 50V	1
L102	4-265T-57242	VHF Coil, FM OSC	1	C113		Ceramic, 47pF, $\pm$ 5%, 50V	1
L103	4-253T-15012	Filter, 2.2 μ H	1	C114		Ceramic, 2pF, $\pm$ 0.25pF, 50V	1
L105	4-257T-51010	Antenna Coil, SW	1	C115		Ceramic, 12pF, $\pm$ 5%, 50V	1
L106, 107	4-257T-56901	Antenna Coil Assembly, MW/LW	1	C116		Ceramic, 62pF, $\pm$ 5%, 50V	1
L108	4-253T-15008	Filter, 1 μ H	1	C117		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
L109	4-258T-39110	Oscillator Coil, SW	1	C118		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
L110	4-258T-39210	Oscillator Coil, MW	1	C119		Ceramic, 10pF, $\pm$ 0.5pF, 50V	1
L111	4-258T-46110	Oscillator Coil, LW	1	C120		Ceramic, 180pF, $\pm$ 5%, 50V	1
T301	4-256T-32530	IF Transformer, FM	1	C121		Styrol, 250pF, $\pm$ 5%, 50V	1
T302	4-256T-22930	IF Transformer, LW/MW/SW	1	C122		Ceramic, 10pF, $\pm$ 5%, 50V	1
T303	4-256T-27730	IF Transformer, FM	1	C123		Polypropylene, 350pF, $\pm$ 5%, 100V	1
T304	4-256T-23930	IF Transformer, LW/MW/SW	1	C124		Polypropylene, 0.0033 μ F, $\pm$ 5%, 100V	1
B.P.F.	4-253T-13400	Filter, FM	1	C125		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
	4-256T-81000			C126		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
	4-256T-81071			C127		Ceramic, 10pF, $\pm$ 0.5pF, 50V	1
CF301	4-256T-81072	or IF Filter, FM	1	C128		Ceramic, 0.022 μ F, $\pm$ 30%, 16V, BC-type	1
	4-256T-81073			C129		Ceramic, 10pF, $\pm$ 5%, 50V	1
	4-256T-81074			C130		Ceramic, 3pF, $\pm$ 0.25pF, 50V	1
CF302	4-256T-81171	IF Filter, LW/MW/SW	1	C131		Ceramic, 0.01 μ F, $\pm$ 80-20%, 50V	1
S1	4-238T-47071	Switch, Band Select, LW/MW/SW/FM	1	C132		Ceramic, 0.001 μ F, $\pm$ 10%, 50V	1
				C133		Ceramic, 30pF, $\pm$ 10%, 50V	1
CNS7	4-240T-11274	Socket, 7P	1	C301		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
CNS12	4-235T-65300	Socket, 2P	1	C302		Ceramic, 330pF, $\pm$ 10%, 50V	1
TP1~5	141-2-382T-16700	Terminal, TP1~5	5	C303		Electrolytic, 10 μ F, 16V	1
SVR501	4-222T-97575	Semi-fixed Resistor, 10K ohm	1	C304		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
VC, VCT	4-224T-22100	Tuning Capacitor	1	C305		Electrolytic, 22 μ F, 10V	1
CT1, 3	4-224T-15471	Trimmer	2	C306		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
CT2, 4	4-224T-15571	Trimmer	2	C307		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
				C308		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
				C309		Ceramic, 0.022 μ F, $\pm$ 20%, 25V, BC-type	1
				C310		Ceramic, 0.001 μ F, $\pm$ 20%, 25V, BC-type	1
				C311		Ceramic, 0.047 μ F, $\pm$ 20%, 25V, BC-type	1
				C312		Electrolytic, 220 μ F, 10V	1
				C501		Ceramic, 0.047 μ F, $\pm$ 20%, 25V, BC-type	1
				C502		Electrolytic, 2.2 μ F, 25V	1
				C503		Polypropylene, 1000pF, $\pm$ 5%, 100V	1
				C504		Electrolytic, 0.47 μ F, 50V	1
				C505		Electrolytic, 2.2 μ F, 25V	1
				C506		Electrolytic, 1 μ F, 25V	1
				C507		Ceramic, 0.047 μ F, $\pm$ 20%, 25V, BC-type	1
				C508		Ceramic, 0.047 μ F, $\pm$ 20%, 25V, BC-type	1
				C509		Electrolytic, 0.22 μ F, 50V	1
				C510		Electrolytic, 0.22 μ F, 50V	1
				C511		Electrolytic, 47 μ F, 10V	1
				C512		Ceramic, 0.01 μ F, $\pm$ 80-20%, 50V	1
				C513		Ceramic, 0.001 μ F, $\pm$ 10%, 50V	1
RESISTORS							
All Resistors are Carbon P-type 1/6W, $\pm$ 5% unless otherwise noted.							
R102		220 ohm	1				
R103		100K ohm	1				
R104		100 ohm	1				
R106		33 ohm	1				
R107		47 ohm	1				
R108		1.5K ohm	1				
R109		6.8K ohm	1				
R110		6.8K ohm	1				
R111		100K ohm	1				
T113		1K ohm	1				
R114		56 ohm	1				
R115		330 ohm, 1/4W	1				
R116		3.9K ohm	1				
R117		3.3K ohm	1				
R118		270K ohm	1				
R119		1.5K ohm, $\pm$ 10%, 1/4W	1				
R301		100 ohm	1				
R302		82 ohm, $\pm$ 10%, 1/4W	1				
R303		150 ohm	1				
R304		5.6K ohm	1				
R305		18K ohm	1				
R306		3.3K ohm	1				
R307		1K ohm	1				
R308		120 ohm	1				
R309		330 ohm	1				
R310		100K ohm	1				
R501		6.8K ohm	1				
R502		680 ohm	1				
R503		560 ohm	1				
R504		3.3K ohm	1				
R505		3.3K ohm	1				
R506		1K ohm	1				
R509		3.3K ohm	1				
R510		3.3K ohm	1				
R511		10 ohm	1				

- 9 -

PARTS LIST

Key No.	Parts No.	Description	Q'ty
LED & AMSS P.C.B. ASS'Y			
	RESISTORS		
All Resistors are Carbon P-type 1/6W, ±5% unless otherwise noted.			
R601		3.9K ohm	1
R602		1M ohm	1
R603		15K ohm	1
R604		56K ohm	1
R605		56 ohm	1
R720		470 ohm	1
R721		10K ohm	1
R722		470 ohm	1
R723		180 ohm	1
	CAPACITORS		
C602		Mylar, 0.15μF, ±5%, 50V	1
C603		Electrolytic, 1μF, 50V	1
C604		Electrolytic, 10μF, 16V	1
C605		Electrolytic, 0.47μF, 50V	1
C606		Electrolytic, 4.7μF, 50V	1
VOLUME P.C.B. ASS'Y			
84	141-4-250T-83971	P.C.B. Ass'y, VOLUME	1
S501	141-4-250T-83902	Switch, FM MODE	1
S831,931	4-238T-64100	Switch, 6 SPEAKER	1
S832,932			
VR701	4-220T-07700	Slide Volume, 50K ohm, BALANCE	1
VR801	4-220T-07800	Slide Volume, 10K ohm TONE	1
901			
VR802	4-220T-07600	Slide Volume, 50K ohm, LOUD VOLUME	1
902			
CNP10	4-236T-23200	Plug, 3P, Speaker	1
	RESISTORS		
All Resistors are Carbon P-type 1/6W, ±5% unless otherwise noted.			
R831,931		6.8K ohm	2
R839,939		120K ohm	2
R840,940		6.8K ohm	2
R841,941		1.5K ohm	2
R842,942		27K ohm	2
	CAPACITORS		
C815,915		Ceramic, 0.022μF, ±20%, 25V, BC-type	2
C816,916		Ceramic, 0.033μF, ±20%, 25V, BC-type	2
C817,917		Ceramic, 0.0033μF, ±20%, 25V, BC-type	2
C825,925		Ceramic, 0.0012μF, ±20%, 25V, BC-type	2
C826,926		Electrolytic, 0.22μF, 50V	2
LINE IN/LINE OUT/EXT MIC P.C.B. ASS'Y			
85	141-4-250T-84071	P.C.B. Ass'y, LINE IN/LINE OUT/EXT MIC	1
	4-240T-31700	Socket, LINE IN/LINE OUT, White	2
	4-240T-31771	Socket, LINE IN/LINE OUT, Red	2
	4-235T-38071	Socket, EXT MIC, Right	1
	4-235T-74171	Socket, EXT MIC, Left	1
CNP9	4-236T-25172	Plug, 4P, B-MIC	1

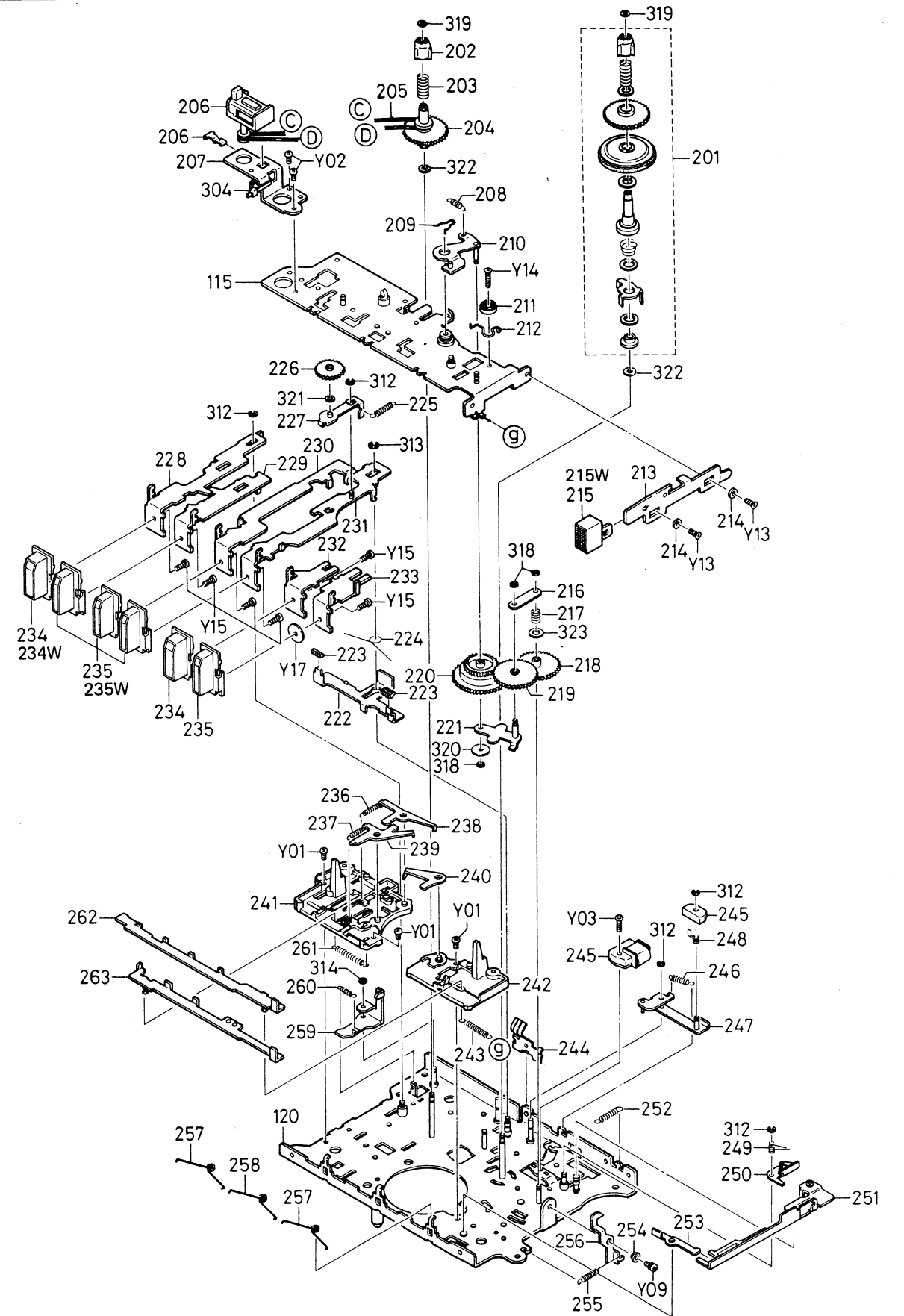
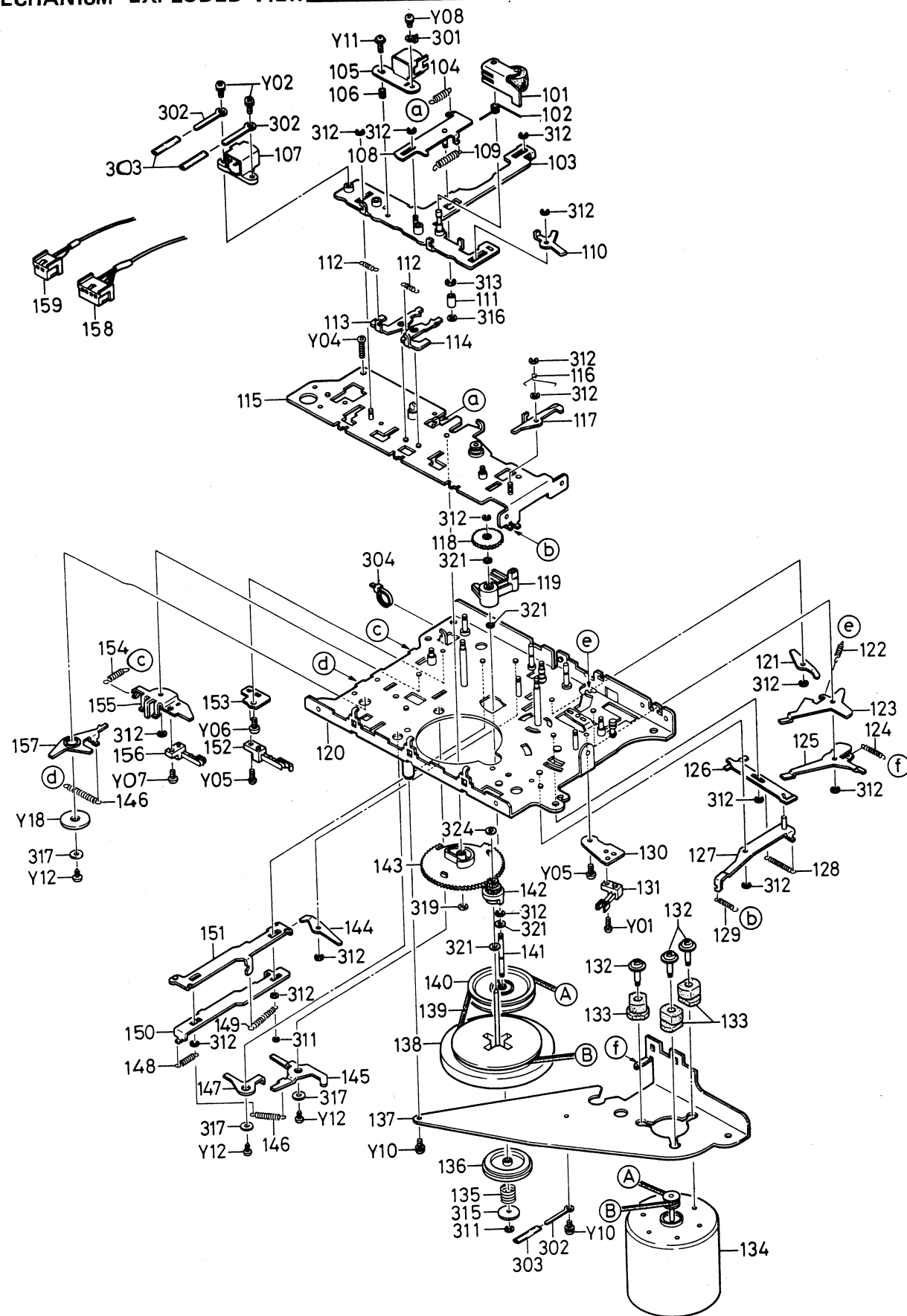
Key No.	Parts No.	Description	Q'ty
LINE IN/LINE OUT/EXT MIC P.C.B. ASS'Y			
	RESISTORS		
All Resistors are Carbon P-type 1/6W, ±5% unless otherwise noted.			
R803,903		2.2K ohm	2
R805,905		2.2K ohm	2
	CAPACITORS		
C708		Electrolytic, 47μF, 10V	1
C801,901		Ceramic, 0.068μF, ±20%, 25V, BC-type	2
VU LEVEL METER P.C.B. ASS'Y			
86	141-4-250T-84200	P.C.B. Ass'y, VU LEVEL METER	1
IC703		Integrated Circuit, LB1423	1
D706		LED, SLP167B, Red, VU LEVEL METER	1
	RESISTORS		
R710,711		Carbon, 10K ohm, ±5%, 1/6W	2
	CAPACITORS		
C709		Electrolytic, 10μF, 16V	1

PARTS LIST

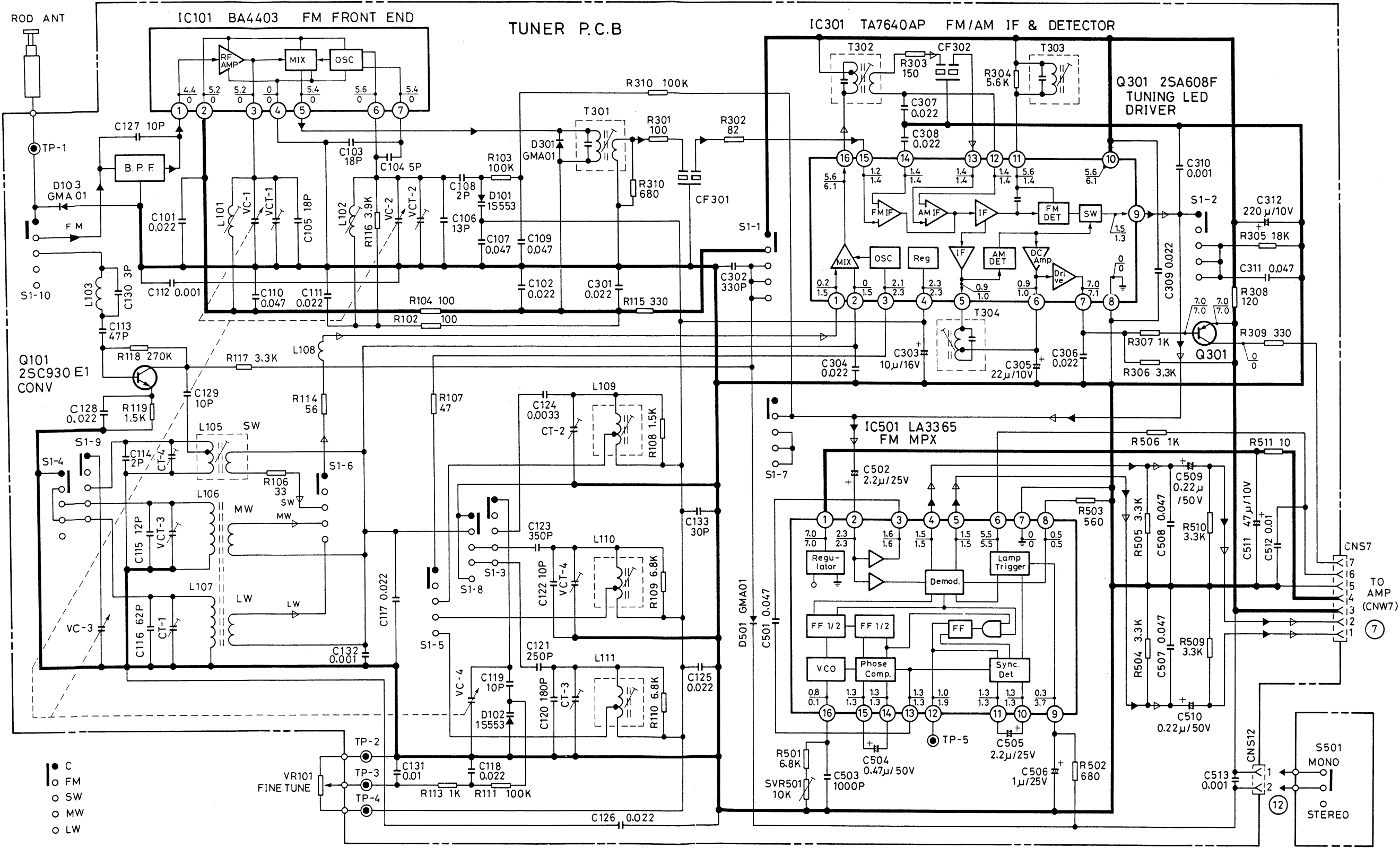
Key No.	Parts No.	Description	Q'ty	Key No.	Parts No.	Description	Q'ty
MECHANISM (TM-Q4)				MECHANISM (TM-Q4)			
101	141-0-545T-07700	Lever Pinch Roller Ass'y	1	215W	141-2-160T-03140	Push Button, White, EJECT M7740K (Blue)	1
102	141-2-852T-72900	Spring Wire, Pinch Roller	1	216	141-2-742T-76900	Lever	1
103	141-0-731T-97100	Slide Ass'y, Head Slide	1	217	141-2-855T-99800	Spring Coil	1
104	141-2-855T-88201	Spring Coil, Head Slide	1	218	141-2-581T-24200	Gear, AUTO STOP	1
105	4-242T-29873	Magnetic Head, Record/Play	1	219	141-2-581T-24100	Gear	1
106	141-2-855T-87700	Spring Coil, Head Azimuth	1	220	141-2-581T-24000	Gear	1
107	4-242T-29500	Magnetic Head, Erasing	1	221	141-0-742T-76800	Lever Ass'y	1
108	141-0-731T-96000	Slide Ass'y, Play	1	222	141-2-731T-97000	Slide, Brake	1
109	141-2-855T-88301	Spring Coil, Head Slide	1	223	141-2-712T-03700	Brake Shoe	2
110	141-2-742T-78400	Lever	1	224	141-2-852T-73000	Spring Wire	1
111	141-2-461T-41600	Pipe	2	225	141-2-855T-99200	Spring Coil	1
112	141-2-855T-88601	Spring Coil	1	226	141-2-581T-24400	Gear, F. FWD	1
113	141-2-742T-78300	Lever, AMSS (L)	1	227	141-0-742T-76100	Lever Ass'y, F. FWD	1
114	141-2-742T-78200	Lever, AMSS (R)	1	228	141-2-731T-96100	Slide, Record	1
115	141-0-737T-09100	Bracket Slide Ass'y, Button Slide	1	229	141-2-731T-96200	Slide, Plat	1
116	141-2-852T-78200	Spring Wire, Eject Lever	1	230	141-2-731T-96300	Slide, REW	1
117	141-2-742T-78500	Lever	1	231	141-0-731T-96400	Slide, Ass'y, F. FWD	1
118	141-2-581T-24300	Gear, REW	1	232	141-2-731T-96500	Slide, Stop	1
119	141-0-742T-75700	Lever Ass'y, REW/F. FWD	1	233	141-2-731T-96601	Slide, Pause	1
120	141-0-311T-40000	Chassis Ass'y	1	234	141-2-160T-04430	Push Button, Black, STOP/RECORD M7740K (Silver, Red, Black)	2
121	141-2-742T-78600	Lever	1	234W	141-2-160T-04440	Push Button, White, STOP RECORD M7740K (Black)	2
122	141-2-855T-89000	Spring Coil	1	235	141-2-160T-04330	Push Button, Black, F. FWD/REW/PLAY/PAUSE M7740K (Silver, Red, Black)	4
123	141-2-742T-77200	Lever	1	235W	141-2-160T-04340	Push Button, White, F. FWD/REW/PLAY/PAUSE M7740K (Blue)	4
124	141-2-855T-88900	Spring Coil	1	236	141-2-856T-06300	Spring Coil, Play Trigger	1
125	141-2-742T-77300	Lever	1	237	141-2-855T-89800	Spring Coil, Play	1
126	141-2-731T-97400	Slide, AUTO STOP	1	238	141-2-742T-76200	Lever, Play Trigger	1
127	141-0-742T-77100	Lever Ass'y, AUTO STOP	1	239	141-2-742T-76302	Lever, Play Lock	1
128	141-2-855T-90100	Spring Coil	1	240	141-2-742T-76400	Lever, CUE/REVIEW	1
129	141-2-855T-89100	Spring Coil	1	241	141-2-737T-09000	Bracket Slide, Button Slide, Left	1
130	141-2-365T-58400	Bracket Switch	1	242	141-2-737T-08900	Bracket Slide, Button Slide, Right	1
131	4-238T-49500	Switch, AUTO STOP (S742)	1	243	141-2-855T-89200	Spring Coil	1
132	141-2-421T-27500	Special Screw, Motor	3	244	141-2-853T-74901	Spring Plate	1
133	141-2-445T-11801	Rubber Cushion Motor	3	245	4-264T-12400	Magnetic Coil, AMSS Solenoid	1
134	4-527T-20301	Motor Ass'y, Motor with Pulley	1	246	141-2-856T-10300	Spring Coil	1
135	141-2-855T-88100	Spring Coil, REW/F. FWD	1	247	141-0-742T-77000	Lever Ass'y, AMSS Lock	1
136	141-0-661T-34600	Pulley Ass'y	1	248	141-2-852T-80500	Spring Wire	1
137	141-0-524T-10800	Bracket Ass'y, Motor	1	249	141-2-852T-73300	Spring Wire	1
138	141-0-521T-13300	Flywheel Ass'y	1	250	141-2-614T-06200	Lever Lock, Pause	1
139	141-2-564T-29700	Square Belt, Main Belt	1	251	141-0-731T-96900	Slide Ass'y, Pause	1
140	141-2-661T-34500	Pulley	1	252	141-2-856T-07800	Spring Wire	1
141	141-2-754T-13000	Shaft	1	253	141-2-742T-76600	Lever, Pause	1
142	141-2-581T-23800	Gear	1	254	141-2-461T-43300	Pipe	1
143	141-2-581T-23900	Gear	1	255	141-2-855T-88700	Spring Coil	1
144	141-2-742T-77400	Lever, F. FWD/REW Switch	1	256	141-2-742T-76000	Lever	1
145	141-2-742T-77600	Lever	1	257	141-2-852T-73100	Spring Wire	2
146	141-2-855T-96400	Spring Coil	2	258	141-2-852T-73102	Spring Wire	1
147	141-2-742T-77700	Lever	1	259	141-2-742T-75900	Lever	1
148	141-2-856T-10300	Spring Coil	1	260	141-2-855T-89900	Spring Coil	1
149	141-2-855T-89400	Spring Coil	1	261	141-2-855T-89300	Spring Coil	1
150	141-2-732T-05100	Slide	1	262	141-2-731T-96700	Slide, Slide Lock	1
151	141-2-731T-97300	Slide	1	263	141-2-731T-96800	Slide	1
152	4-238T-03900	Switch, Power (S741)	1	301	123-2-472R-00200	Lug	1
153	141-2-365T-57200	Bracket Switch	1	302	141-2-472T-02200	Lug	3
154	141-2-855T-88800	Spring Coil	1	303	141-2-490T-00600	Tube, 2φx20mm	3
155	141-2-742T-77500	Lever, F. FWD/REW (AMSS)	1	304	141-2-464T-40200	Fixer	2
156	4-238T-48400	Switch, AMSS (S601)	1	311	141-2-457T-23700	Special Washer, "E" Ring, 1.2mm	2
157	141-2-742T-77800	Lever, Record Lock	1	312	141-2-457T-23800	Special Washer, "E" Ring, 1.5mm	18
158	4-240T-48800	Socket, 4P, Record/Play Head (CNS 6)	1	313	141-2-457T-23000	Special Washer, "E" Ring, 2mm	2
159	4-240T-48900	Socket, 2P, Erasing Head (CNS 4)	1	314	141-2-457T-04110	Special Washer, 1.7x4.5x0.5mm	3
201	141-0-661T-34300	Pulley Ass'y, Take-up	1	315	141-2-457T-06200	Special Washer, 2.1x9x0.3mm	1
202	141-2-531T-13701	Reel Plate, Supply	1	316	141-2-453T-33901	Washer, 1.2x2.5x0.25mm	1
203	141-2-856T-09600	Spring Coil, Back Tension	1	317	141-2-457T-14000	Special Washer, 2x8x0.2mm	3
204	141-2-581T-24600	Gear, Supply	1	318	141-2-453T-33600	Washer, 1.3x3.2x0.25mm	5
205	141-2-564T-29800	Square Belt, Tape Counter	1	319	141-2-453T-33100	Washer, 1.6x3.2x0.25mm	3
206	141-2-811T-12500	Counter, Tape	1	320	141-2-453T-31200	Washer, 2x8.5x0.25mm	1
207	141-2-812T-12600	Bracket Counter	1	321	141-2-453T-30101	Washer, 2.1x4.0.25mm	5
208	141-2-855T-88500	Spring Coil	1	322	141-2-453T-30201	Washer, 2.6x4.7x0.25mm	2
209	141-2-852T-77000	Spring Wire	1				
210	141-0-742T-76700	Lever Ass'y	1				
211	141-2-461T-43600	Pipe	1				
212	141-2-852T-77301	Spring Wire	1				
213	141-2-731T-97500	Slide, Eject	1				
214	141-2-461T-41700	Pipe, Eject Slide	2				
215	141-2-160T-03130	Push Button, Black, Eject M7740K (Silver, Red, Black)	1				

(Continuance to page 24)

MECHANISM EXPLODED VIEW



SCHEMATIC DIAGRAM (TUNER)



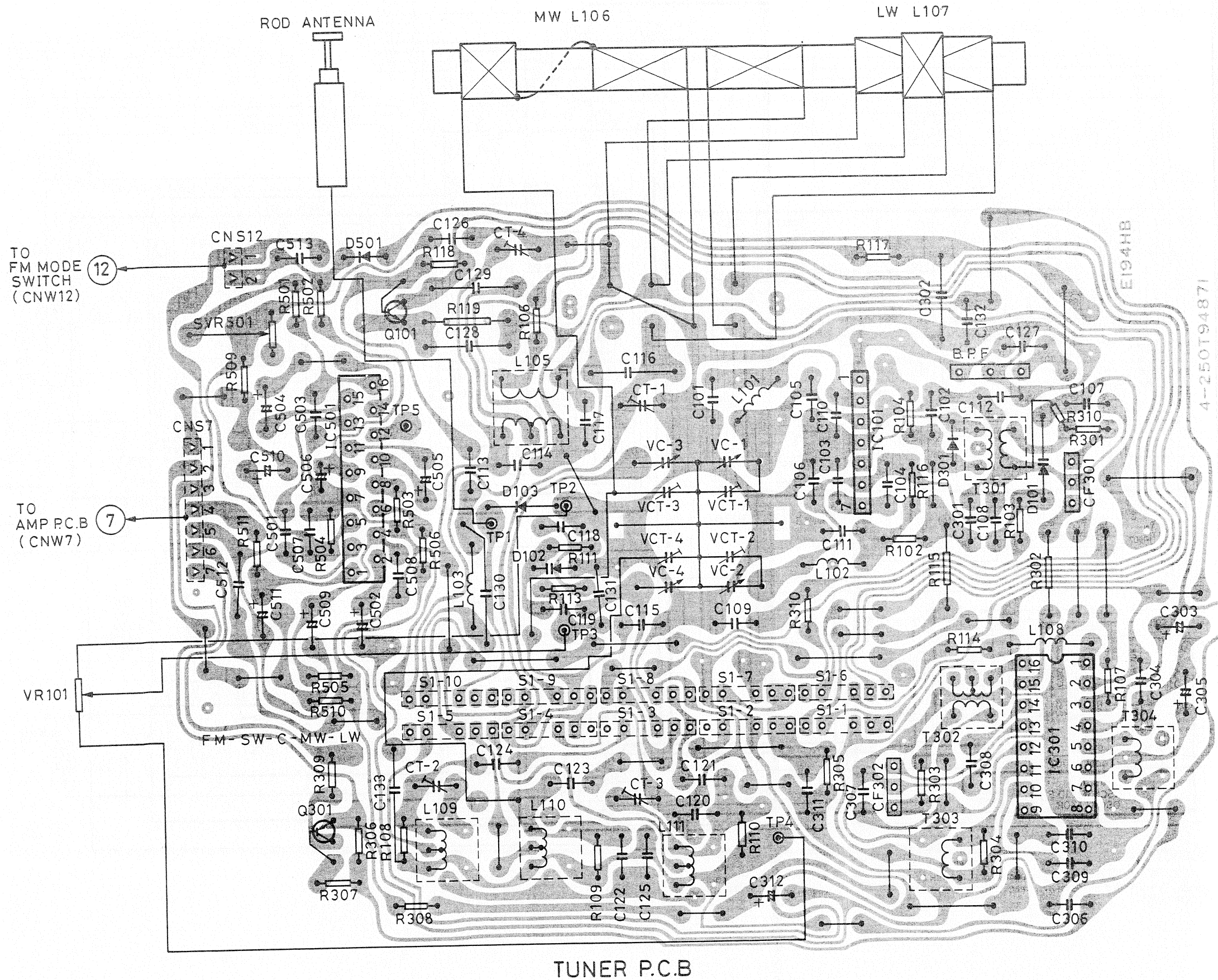
SWITCHES
S1-1~S1-10....BAND SELECT SWITCH (LW MW SW FM)
S501.....FM MODE SWITCH (MONO STEREO)

CONTROL
VR101.....FINE TUNE

SIGNAL
— + B LINE
— - B LINE

VOLTAGE INDICATED
FM (V)
AM (V)
AM = LW / MW / SW

WIRING DIAGRAM (TUNER)



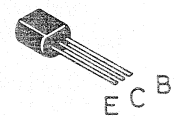
SWITCHES

S1.....BAND SELECT SWITCH

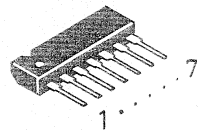
CONTROL

VR101....FINE TUNE

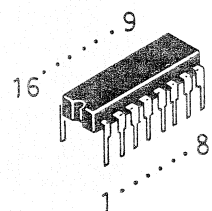
Q101.....2SC930
Q301.....2SA608



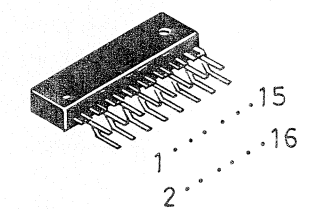
IC101.....BA4403

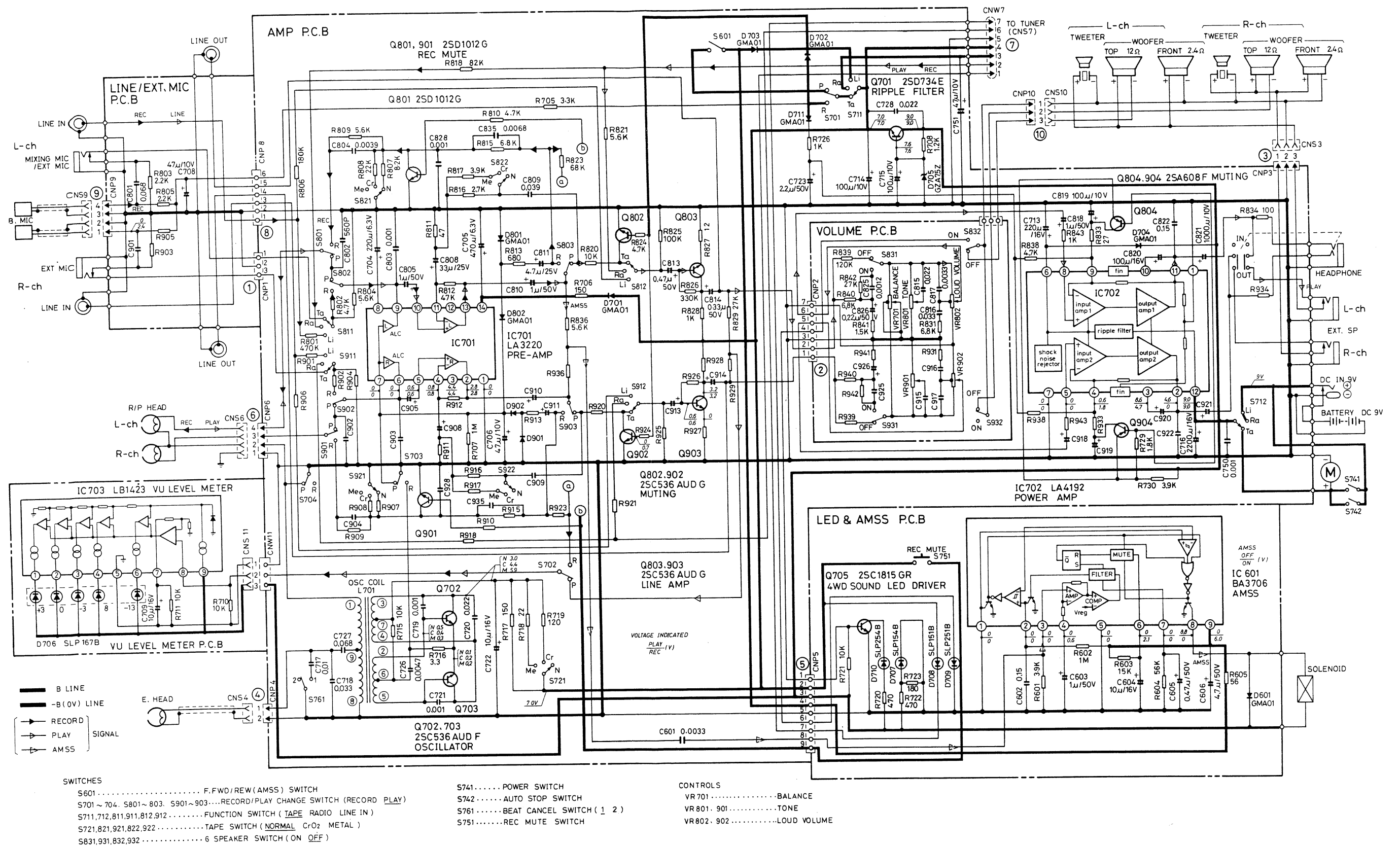


IC301.....TA7640AP

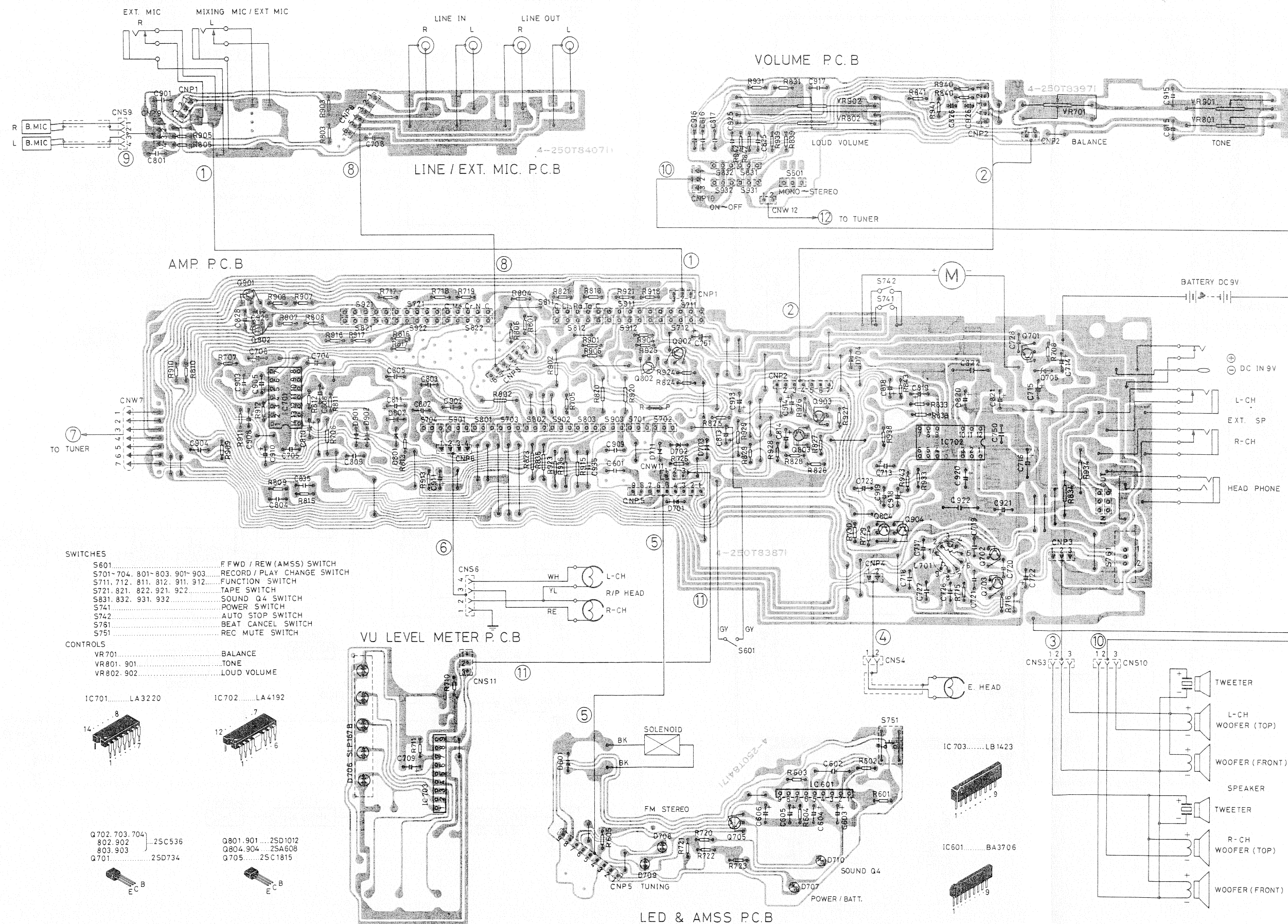


IC501.....LA3365

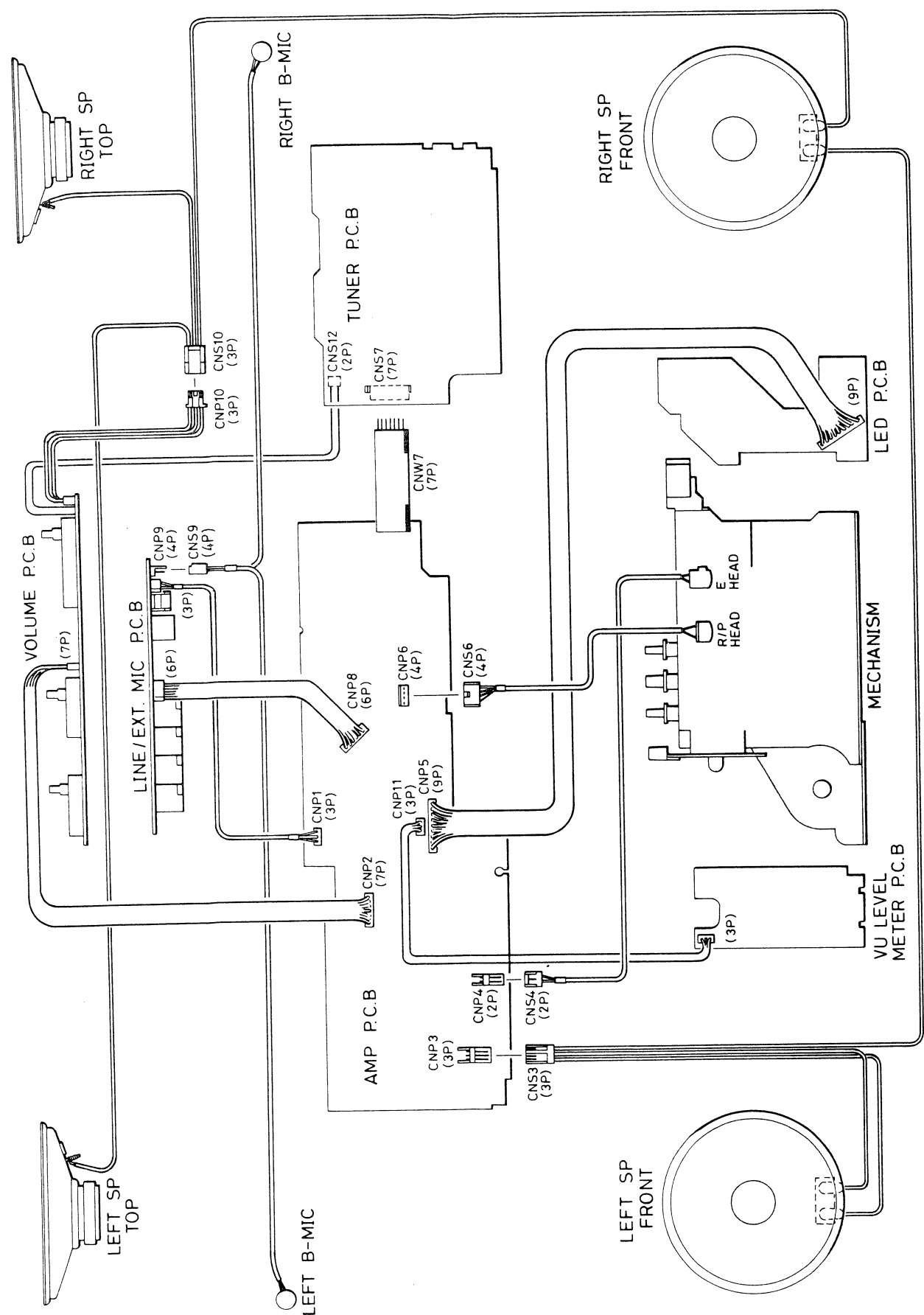




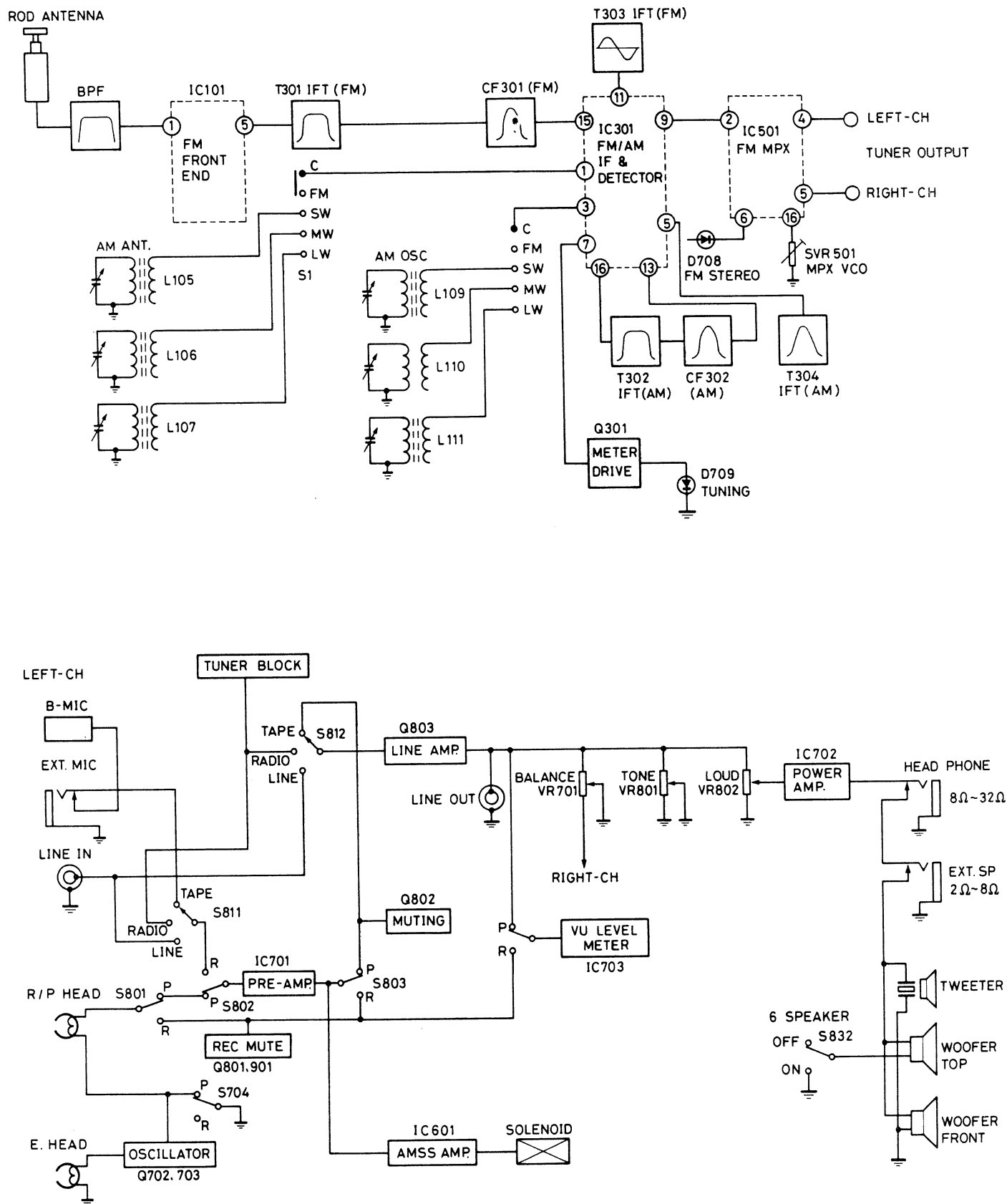
WIRING DIAGRAM (AMP)



WIRE CONNECTION



BLOCK DIAGRAM



PARTS LIST

Key No.	Parts No.	Description	Q'ty
MECHANISM (TM-Q4)			
323	141-2-453T-30501	Washer, 4.1x6.5x0.25mm	1
324	141-2-453T-30102	Washer, 2x4x0.5mm	1
MECHANISM (TM-Q4)			
Y1		Pan Hd. Screw, 2x4mm	4
Y2		Pan Hd. Screw, 2x5mm	4
Y3		Pan Hd. Screw, 2x6mm	1
Y4		Pan Hd. Screw, 2x8mm	1
Y5		Pan Hd. Screw, 2.3x4mm	2
Y6		Pan Hd. Screw, 2.6x3mm	1
Y7		Pan Hd. Screw, 2.6x4mm	1
Y8		Pan Hd. Screw with Spring Washer, 2x6mm	1
Y9		Pan Hd. Screw with Spring Washer, 2x4mm	1
Y10		Pan Hd. Screw with Apring Washer, 2x5mm	2
Y11		Pan Screw Washer Hd., 2x6mm	1
Y12		Pan Hd. Tapping Screw, 2x6mm	3
Y13		Flat Hd. Screw, 2x6mm	2
Y14		Flat Hd. Screw, 2x10mm	1
Y15		SP Pan Hd. Tapping Screw, 1.7x6mm	6
Y16		(Not used)	
Y17		Washer, 2x8x0.5mm	1
Y18		Washer, 4x13x1.2mm	1

Safety notice:
All parts bearing the  symbol were manufactured to conform to special safety standards. When replacing, do not use parts numbers other than those specified.

DIAL CORD STRINGING

